

of competency for surgical trainees. We looked at the use of video to assess the efficacy of learning orthopaedic techniques.

Method: A narrated navigated unicompartamental knee replacement video was employed as a training video. Junior surgeons were randomised into video training versus operational manual. They then performed the procedure on a saw bone and were scored against a Delphi protocol Framework.

Result: There were 16 participants in total (7 video, 9 manual). The mean score was 10.0 in the manual group and 12.4 in the video group (maximum 20). The standard deviation was 5.5 in the manual group, 3.2 in the video. 94% trainees viewed video training as useful and better than manuals.

Conclusion: Our results demonstrate a trend towards improved scores in the video group with greater consistency and less outliers. Trainees subjectively rated video training more useful, and all agreed that video would be an effective method of training. Video may also have a role in assessments and web based training. Video technology in training is an avenue that offers multiple benefits and warrants further exploration.

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0513: A SNAPSHOT OF THE EVALUATION OF FRACTURE CLINIC SERVICES AT A MAJOR TRAUMA CENTRE AGAINST BOAST 7 GUIDELINES

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Aim: To evaluate the fracture clinic service at a major trauma centre against BOAST 7 guidelines

Method: All new fracture clinic referrals in August 2015 had their records reviewed to see if they met the BOAST 7 guidelines. The focus being on the first 4 points. Exclusion criteria included:

- Referrals from other fracture clinics.
- Initial treatment received elsewhere.
- Patients presenting with post-op complications.
- Chronic complaints.
- Patients mistakenly referred as new.

Result: There were 616 new referrals to the fracture clinic in August 2015. Of these 81 were excluded. Of the 535 remaining, a further 30 DNA'd their appointments.

Out of 505 new referrals, 483 were seen within 72 hours (95.64%), 20 were seen beyond 72 hours and 2 patients could not be categorised due to it being unclear when the referral was received. (BOAST 7 Point 1)

All patients were seen by an appropriately qualified member of staff (BOAST 7 Point 2)

468 patients (92.67%) had letters pertaining to their visit (BOAST 7 Point 3) Plaster room and radiography facilities were available to all (BOAST 7 Point 4)

Conclusion: Of the BOAST 7 points explored, our fracture clinic performed favourably. Further evaluation is currently ongoing.

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0566: USE OF THE EXOGEN ULTRASOUND SYSTEM TO PROMOTING BONE HEALING IN ESTABLISHED NON-UNION

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Background: Non-union is a serious complication contributing to pain, disability and dysfunction. Exogen is a low-intensity pulsed ultrasound therapy and is NICE approved as a safe, cost effective treatment for non-union secondary to long bone fracture.

Method: Retrospective audit of prospectively collected data. All patients who received Exogen treatment from May 2012 to January 2015 were included. Patient records and radiographs were reviewed. Linked data on cohort risk factors and previous interventions were collated. Outcome was assessed one-year post primary Exogen treatment.

Result: 107 patients were identified. 6 were lost to follow up. n = 101 patients (109 bones) were identified, 60M: 41F with a median age of 48 (21-86).

86/109 (79%) of Exogen applications were in long bone non-unions and were consistent with NICE criteria. The union rate in this group was 71%. The union rate for other uses was 61%. 29/109 (27%) of bones required Exogen treatment >3 months. No side effects of Exogen were reported.

Conclusion: Exogen treatment is an effective adjunct in fracture non-union. Its efficacy is highest when used in accordance with NICE guidance in patients with minimal risk factors. Exogen may also have a clinical role outside of NICE guidance, for example in hind-foot arthrodesis.

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0586: HOW CAN WE BEST PREDICT MORBIDITY AND MORTALITY IN HIP FRACTURE PATIENTS?

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Guidelines suggest that only pre-morbid mobility, cognitive status and fitness for anaesthesia should determine patients suitability for hip hemiarthroplasty versus total hip replacement (THR) following neck of femur (NOF) fracture. The Sernbo score uses age, habitat, mobility and cognition to risk stratify NOF patients, and to differentiate suitability for THR over hemiarthroplasty. The Oxford Hip Score (OHS) is used to subjectively measure hip function.

81 patients whom had undergone THR following fracture had pre-fracture and post-operative OHS obtained following telephone conversation. Sernbo scores were calculated from patients notes.

15 patients were lost to follow up, leaving 66 in the final study. The mean follow up was 24.1 months and mean age at operation was 73 years. OHS fell on average by 4.5 points following operation, regardless of age or pre-fracture score. Higher Sernbo score and older age were associated with significantly higher mortality.

Sernbo score can be used to risk-stratify patients pre-operatively and we suggest it calculated for all fractured NOF patients. OHS fell across all levels of pre-fracture function, suggesting this can be used pre-operatively to gauge post-operative morbidity. Age was also a predictor of mortality and shouldn't be neglected when deciding operative management, despite omission from NICE guidelines.

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0603: A CLOSED LOOP AUDIT TO ASSESS HOW MANY AUDITS CLOSE THE LOOP

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Background: Evidence suggests only 17-29% of audits within orthopaedic departments complete the audit cycle, prompting examination of audit practice at our own institution.

First loop: All audit projects between July 2011 and March 2013 were assessed against NICE definition for audit and HQIP criteria for best practice. Of 17 audits, 47% closed the audit cycle and only 29% met all criteria for best practice. Seven out of eight audits that closed the cycle demonstrated improvements in practice.

Recommendations: Audit initiation forms should be completed when registering all audits. Old audits that hadn't been completed were identified to help close the loop. All unfinished audits should be highlighted at monthly departmental meetings.

Second Loop: Audits from April 2014 to July 2015 were again assessed. From 11 audits, only 36% closed the audit cycle and met criteria for best practice. All audits that closed the loop demonstrated improvements.

Conclusion: To our knowledge, this is the first closed loop audit assessing audit performance. Unfortunately our audit practice worsened, however it was consistently found that nearly all completed, high quality audits showed demonstrable improvements. This highlights the importance of